At IN

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

> I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 2, 2004

(Date of Deposit)

James D. Wood

Name of person mailing Document or Fee

Signature

December 2, 2004

Date of Signature

Re: Application of:

Serial No.:

Wike et al. 10/001,389

Filed:

October 23, 2001

For:

Automatic Electronic Article

Surveillance for Self-Checkout

Group Art Unit:

2876

Examiner:

Uyen-Chau N. Le

Our Docket No.:

9423 (1001-0728)

## TRANSMITTAL OF REPLY TO EXAMINER'S ANSWER

Please find for filing in connection with the above patent application the following documents:

- 1. Original of the Reply to Examiner's Answer;
- 2. Three (3) copies of the Reply to Examiner's Answer; and
- 3. One (1) return post card.

Commissioner for Patents December 2, 2004 Page 2

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 13-0014.

Respectfully Submitted,

MAGINOT, MOORE & BECK

December 2, 2004

James D. Wood

Registration No. 43,285 Bank One Center/Tower

111 Monument Circle, Suite 3000 Indianapolis, IN 46204-5115

Enclosures





#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 2, 2004

(Date of Deposit)

James D. Wood

Name of person mailing Document or Fee

Signature

<u>December 2, 2004</u>

Date of Signature

Re:

Application of:

Wike et al.

Serial No.:

10/001,389

Filed:

October 23, 2001

For:

Automatic Electronic Article Surveillance

for Self-Checkout

Group Art Unit:

2876

Examiner:

Uyen-Chau N. Le

Our Docket No.:

9423(1001-0728)

#### REPLY TO EXAMINER"S ANSWER

Sir:

This is a Reply Brief submitted in response to the Examiner's Answer mailed on November 2, 2004. Three copies of the Reply Brief are submitted herewith.

## **Discussion**

Discussion re First Claim Group (Claims 1-3)

In the grounds for rejection, the Examiner repeated the grounds for rejection of claims 1-4, 8-9 and 15-16. However, the Examiner provided new details regarding the rejection of the claims in the first claim group. One new detail is a newly proposed motivation for the modification of U.S. Patent No. 5,594,228 to Swartz et al. (hereinafter "Swartz") with U.S. Patent No. 5,469,142 to Bergman et al. (hereinafter "Bergman"). The Examiner now asserts that one of skill in the art would be motivated to add "a specific step of determining the presence of an active tag as taught by Bergman into the self-checkout system of Swartz et al in order to assure that an active surveillance tag, which attached (sic) to a paid item is deactivated". (Examiner's Answer at page 7).

The timing of the determining step now proposed by the Examiner is not clear. However, the proposed step must occur either before or after the deactivation step. In either case, the proposed modification fails. If the step of determining is performed before the deactivating step, then the Examiner has failed to identify the motivation for making the proposed modification as discussed more fully in the following section. In the event the Examiner intended to modify Swartz by performing the step of determining after the step of deactivation, then the proposed combination does not arrive at the invention of claim 1.

The system of Swartz includes a microprocessor that stores information identifying each surveillance tag by a bar code attached to the surveillance tag. (Swartz

at Abstract). In one embodiment, the surveillance tag is directly associated with specific details (e.g. price) about the item to which the tag is attached by using an identical bar code on a hanger tag for the item. (Id. at column 20, lines 48-49). In the event a different bar code is provided for the hanger tag, a conversion database is maintained which associates each surveillance tag with the hanger tag for a particular item. (Id. at column 20, lines 49-60). Therefore, by scanning the hanger tag, which is done to check-out an item, the system of Swartz is alerted that an item associated with a specific surveillance tag is being scanned. Thus, once a customer scans an item, the surveillance tag identification number is stored in a memory identifying surveillance tags associated with scanned items. (Id. at column 19, lines 24-26).

After a customer has paid for the scanned items, the system of Swartz reads the memory wherein surveillance tag identification numbers for scanned items has been stored. If there are any remaining surveillance tags (i.e. tags that have not been deactivated), then the customer is directed to present the surveillance tag for deactivation. (Id. at column 20, lines 14-26).

Thus, after scanning an item, the system of Swartz has the identification code of the associated security tag stored in memory. Accordingly, there is no need to make a determination as to whether or not a security tag is on the item. Therefore, the Examiner is apparently proposing to add a step of determining the presence of a security tag *after* deactivation of the security tag in accordance with the teaching of Swartz. This is supported by the alleged motivation which is directed to "[assuring] that an active surveillance tag, which attached (sic) to a paid item is deactivated" (Examiner's Answer at page 7) since detecting a security tag known to be active cannot provide any such

assurance. Therefore, in accordance with the proposed modification, a surveillance tag is allowed to be deactivated and the step of determining the presence of a security tag in accordance with Bergman is performed thereafter.

However, as set forth in the Appeal Brief, claim 1 recites a step of allowing deactivation "after determining that the item has an electronic article surveillance tag".

(Claim 1). Thus, even including the detector of Bergman in the system of Swartz and verifying that a surveillance tag has been deactivated does not disclose the step of allowing deactivation as recited in claim 1 since the proposed step of determining occurs after the step of deactivating.

Accordingly, the proposed combination of Swartz and Bergman does not arrive at Appellants' invention of claim 1. Thus, the proposed combination of Swartz and Bergman does not establish a *prima facie* case of obviousness under 35 U.S.C. § 103 with regard to the invention defined in claim 1. As a result, claim 1 is allowable over Swartz and Bergman. Accordingly, the Board of Appeals is respectfully requested to reverse this rejection of claim 1.

## 2. <u>Alternatively, There is No Motivation To Combine the References</u>

The Examiner does propose at one point that the step of "determining" in accordance with Bergman is performed before the customer is instructed to present the surveillance tag for deactivation. (Examiner's Answer at pages 7-8). However, the Examiner has failed to provide any motivation for such a combination.

As discussed above, in order to provide the allegedly desired assurance of deactivation, the step of "determining" in accordance with Bergman must be performed

after deactivation. To the extent the Examiner intends to argue that one of ordinary skill in the art with a desire to assure deactivation would perform a step of "determining" when it is already known that an active surveillance tag has not yet been deactivated, the line of reasoning is not convincing. In fact, it appears that one of ordinary skill in the art would avoid the additional expenditure of resources for the detector of Bergman when such duplicity of function provides no ascertainable benefit.

Therefore, the Examiner has not provided a reasonable motivation for one of ordinary skill in the art to perform the step of "determining" as taught by Bergman at a point in the process before the deactivation step as taught by Swartz has even been attempted. Accordingly, there is no teaching or suggestion to one skilled in the art to combine Bergman with Swartz, and a *prima facie* case of obviousness under 35 U.S.C. § 103 has not been established with regard to the invention of claim 1. Accordingly, the Board of Appeals is respectfully requested to reverse this rejection of claim 1.

## 3. The Newly Proposed Combination is Impermissible

Another new detail set forth in the Examiner's Answer is that the Examiner now proposes combining the system of Bergman with the system of Swartz in a new manner. Specifically, the Examiner has proposed modifying the system of Swartz to include Bergman's electronic surveillance detector and its associated system, and reprogramming the system so that "only the step of detecting" is performed. (Examiner's Answer at page 9). The Examiner's proposed combination is impermissible.

As stated in *Application of Wesslau*, 353 F.2d 238, 242 (CCPA, 1965) (emphasis added) "[t]he ever present question in cases within the ambit of 35 U.S.C. § 103 is

whether the subject matter as a whole would have been obvious to one of ordinary skill in the art *following the teachings* of the prior art at the time the invention was made."

Bergman teaches a system that *automatically* performs the sequential steps of (i) detection, (ii) deactivation, (iii) increase of gain and (iv) attempted second detection.

The Examiner has not explained how Bergman's teaching of a number of sequential steps that ensure a surveillance tag has been deactivated would lead one of ordinary skill in the art to eliminate four of the five steps, especially if one is concerned with "[assuring] that an active surveillance tag, which attached (sic) to a paid item is deactivated". (Examiner's Answer at page 7). In fact, to the extent any combination with Swartz is suggested, the teaching of Bergman would suggest the wholesale incorporation of the system of Bergman with the system of Swartz. However, as set forth more fully in the Appeal Brief, such a combination would not arrive at the invention of claim 1.

Accordingly, the Examiner has attempted to pick out a single step of the method taught by Bergman for combination with Swartz.

As further stated in Application of Wesslau, 353 F.2d at 242,

It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art."

There is nothing in Bergman that fairly suggests reprogramming the system of Bergman to perform only a single step in order to achieve the objective of assuring that a surveillance tag has been deactivated. Such an evisceration of the teachings of Bergman for the sole purpose of rejecting claim 1 is not consistent with 35 U.S.C. § 103.

Therefore, the proposed combination is impermissible. Accordingly, the Board of Appeals is respectfully requested to reverse this rejection of claim 1.

## 4. The Examiner's Reply is Inaccurate

The Appeal Brief notes that the proposed combination of Swartz and Bergman is impermissible because the proposed modification changes the principle of operation of Swartz. (Appeal Brief at pages 9-10). The Examiner attempts to characterize that discussion as being directed to opposing a change of the scope of Swartz. (Examiner's Reply at pages 8-9). The Examiner then contends that the proposed modification of Swartz to use a surveillance tag detector in lieu of an optical scanner would "improve the Swartz's system (sic)". (Id.). The Examiner's characterization of the Appeal Brief is inaccurate and the proposed modification does change a principle of operation.

The field of Swartz' invention is "laser scanning systems for reading data in the form of indicia, such as bar code symbols". (Swartz at column 1, lines 21-23). The objects of Swartz are directed to "a device for reading bar code symbols". (Id. at column 3, lines 13-14 et seq.). Modifying the system of Swartz to use a device which uses "RF signals verse (sic) barcode scanning" (Examiner's Answer at page 9) not only changes the principle of operation (RF versus optical) but also renders Swartz inoperable for its intended purpose of reading bar codes as discussed in the Appeal Brief.

## 5. <u>Conclusion</u>

Therefore, the first claim group is patentable over the prior art as discussed in the Appeal Brief and for at least the reasons set forth above.

Discussion re Second Claim Group (Claim 4)

## 1. The Newly Proposed Combination is Impermissible

The Examiner now states that the "rechecking step" (the step of determining whether a tag has been deactivated) of claim 4 is disclosed by Bergman at column 3, lines 30 et seq. (Examiner's Answer at page 10). As was the case with the detecting step of claim 1, the Examiner has impermissibly selected one of a sequence of steps taught by Bergman while ignoring the full teaching of Bergman.

Specifically, the "rechecking step" identified by the Exmaienr is one of the automatic steps of Bergman discussed above. More specifically, Bergman contemplates that the rechecking step will be performed on the order of three hundred and fifty milliseconds after completion of the attempted deactivation. (Bergman at column 3, lines 25-27). However, the Examiner has not identified any teaching in Bergman or elsewhere that suggests that only one or two steps of the entire automatic sequence taught by Bergman should be separated from the system of Bergman for use in a system such as is taught by Swartz.

Therefore, the Examiner has impermissibly selected a single step out of the method of Bergman while excluding the remainder of the automatically performed steps as taught by Bergman. Accordingly, in addition to the reasons set forth in the Appeal Brief, claim 4 is patentable over the prior art for at least the reason set forth above.

Discussion re Third Claim Group (Claims 5-7)

## 1. The Newly Proposed Reasoning is Not Convincing

The Examiner has apparently abandoned the grounds for rejecting claim 5-7, 10-

12 and 17-19 set forth in the Final Office Action dated December 16, 2003. In lieu of the previous motivation for the combination of Swartz, Bergman and U.S. Patent Application Publication No. 2002/0096564 A1 of Bellis Jr. et al. (hereinafter "Bellis"), the Examiner now reasons that one of skill in the art would incorporate a second detector into the combination of Swartz and Bergman to further detect if a surveillance tag had been deactivated so as to provide fault protection. (Examiner's Answer at page 5). Specifically, the Examiner now opines that a second detector (in addition to the detector of Bergman) would be added "in the event the [Swartz] lamp is malfunctioning (i.e. illuminating when an unsuccessful deactivation occurs)". The Examiner's line of reasoning is not convincing.

As an initial matter, the Examiner has provided no support for the premise of his motivation. Specifically, the lamp 84 of Swartz illuminates "when a successful tag deactivation has occurred, such as indicated by a return signal from the tag. (Swartz at column 14, lines 65-67). Thus, to illuminate when an unsuccessful deactivation occurs, the lamp of Swartz must somehow receive a signal from the tag indicating that the tag has been deactivated when the tag has not in fact been deactivated. The Examiner has failed to identify how a surveillance tag could generate such a signal.

Moreover, Bellis is relied upon for teaching a *second* detector. However, the Examiner has not explained why the *first* detector provided by Bergman is not fully capable of providing a double check to ensure that the lamp is not malfunctioning, especially in light of the fact that the Bergman discloses a method of using a single detector for double checking as discussed above. Thus, because the Examiner has not provided any rationale explaining why one of skill in the art would include a second

detector at increased expense when a single detector provides the same functionality as the second detector for half the cost, the Examiner's logic is not convincing.

Finally, the examiner stated that the motivation for using the second detector to detect if the lamp had malfunctioned includes "the capability of detecting the electronic surveillance tag at a different place in the system". Examiner's Answer at page 11). However, the Examiner has failed to explain why the location of the first sensor renders it less capable of determining if the lamp has malfunctioned. Therefore, the Examiner's logic is not convincing.

For all of the foregoing reasons, the Examiner has failed to "present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references". *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). Therefore, under *Ex parte Clapp*, the Examiner's line of reasoning is not convincing. Accordingly, in addition to the reasons set forth in the Appeal Brief, the third claim group is patentable over the prior art for at least the reason set forth above.

Discussion re Fourth Claim Group (Claims 8-9 and 13-14) and Sixth Claim Group (Claims 15-16 and 20)

The Examiner's Answer repeats the assertions made with respect to the first claim group with respect to the claims in the fourth and sixth claim groups. (Examiner's Answer at page 21). The claims in the fourth and sixth claim groups include limitations similar to those discussed above with respect to the first claim group. Therefore, in addition to the respective reasons set forth in the Appeal Brief, the fourth and sixth claim groups are patentable over the prior art for at least the reasons set forth above with

respect to the first claim group.

Discussion re Fifth Claim Group (Claims 10-12) and Seventh Claim Group (Claims 17-19)

The Examiner's Answer repeats the assertions made with respect to the third claim group with respect to the claims in the fifth and seventh claim groups. (Examiner's Answer at page 21). The claims in the fifth and seventh claim groups include limitations similar to those discussed above with respect to the third claim group. Therefore, in addition to the respective reasons set forth in the Appeal Brief, the fifth and seventh claim groups are patentable over the prior art for at least the reasons set forth above with respect to the third claim group.

#### Conclusion

The Examiner's Answer introduces a number of new rationales for rejection and modifies the elements of the references relied upon in rejecting various claims of the present application. However, for the reasons set forth above, the new rationales and combinations are not valid. Thus, for all of the foregoing reasons and/or the reasons set forth in the Appeal Brief, claims 1-20 are not unpatentable under 35 U.S.C. § 103(a). As a consequence, the Board of Appeals is respectfully requested to reverse the rejection of these claims.

Respectfully submitted,

MAGINOT, MOORE & BECK LLP

James D. Wood

Attorney for Applicants

Attorney Registration No. 43,285

December 2, 2004

Maginot Moore & Beck LLP Bank One Tower/Center 111 Monument Circle, Suite 3000 Indianapolis, Indiana 46204-5115

Telephone: (317) 638-2922 Facsimile: (317) 638-2139